



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D4842-041

Job Sheet 166907



Part No: D4842-041

Job Qty: 4 ea

Part Name: Lower Cutter Assembly



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 10/19/17

Job Tracking No:

Due Date: 10/26/17

Created By: Victoria Michaud-Febrille

Type: Stock

Description:

Ship Via:

DAS 9
applies per concession 400000061736

U/R

OK
10/2/14

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea	10/26/17	10/26/17	0.00	0.00	Start Up Stores/Pkg-1		FEB 12 2018
110	Packaging	4 pcs	10/26/17	10/26/17	0.00	0.00	Packaging1		FEB 12 2018
120	Small Fab	4 pcs	10/26/17	10/26/17	0.00	9.09	Small Fab		
130	QC	4 pcs	10/26/17	10/26/17	0.00	0.00	QC5		
140	Packaging	4 pcs	10/26/17	10/26/17	0.00	0.00	Packaging3		FEB 22 2018
150	QC21-SA	4 Ea	10/26/17	10/26/17	0.00	0.00	QC21		FEB 22 2018

Part Op 120 - Assemble as per dwg and apply loctite 598 on all faying surfaces.
Descriptions:

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D4839-1	8	0	0	0
	D4842-1	4	14	0	0
	D4842-3	4	12	0	0
	D4842-4	4	8	0	0
	MS21042L08	24	2,397	0	0
	MS27039-08-19	24	640	0	0
	NAS1149FN832P	48	7,618	0	0

Part Specifications

Specifications could not be found.

Plex 12/19/17 1:24 PM dart.leroux.jason

POSITIVE RECALL

EFFECTIVE 10/2/14 AUTH UP

RELEASED PD DATE 10-02-26

Requires QA sign-off for Leonardo concession

REFUSED
DATE
VOLUME

DART
AEROSPACE

S041259



Lower Cutter Assembly

PART NO: **D4842-041**
Original Serial #: **S041259**
Revision:
Operation:
Change No:

Start up Operation

02/12/18
Job No: 166907

Dart Aerospace Ltd.
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Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



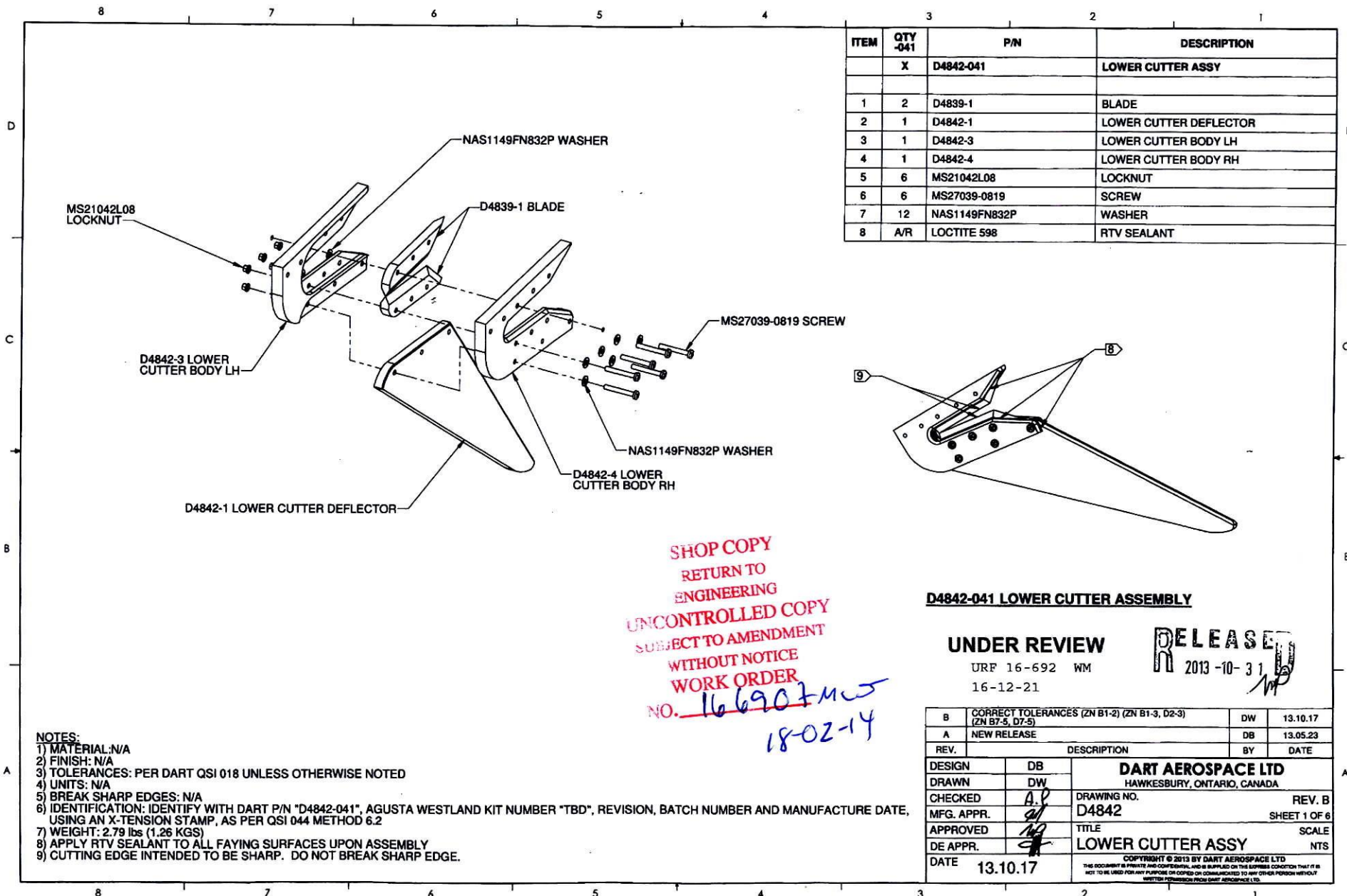


Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Master Unit 000714

Tel (613) 632-5200

Containers on Master Unit 000714				
Serial No	Part No	Customer Part No	Status	Quantity
S040766	D4839-1		Allocated	8
F159671	D4842-1		Allocated	1
S040931	D4842-1		Allocated	3
F164957	D4842-3		Allocated	4
F164958	D4842-4		Allocated	4
S040929	MS21042L08		Allocated	24
S040928	MS27039-08-19		Allocated	24
S040926	NAS1149FN832P		Allocated	48



ITEM	QTY -041	P/N	DESCRIPTION
	X	D4842-041	LOWER CUTTER ASSY
1	2	D4839-1	BLADE
2	1	D4842-1	LOWER CUTTER DEFLECTOR
3	1	D4842-3	LOWER CUTTER BODY LH
4	1	D4842-4	LOWER CUTTER BODY RH
5	6	MS21042L08	LOCKNUT
6	6	MS27039-0819	SCREW
7	12	NAS1149FN832P	WASHER
8	A/R	LOCTITE 598	RTV SEALANT

NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: N/A
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4842-041", AGUSTA WESTLAND KIT NUMBER "TBD", REVISION, BATCH NUMBER AND MANUFACTURE DATE, USING AN X-TENSION STAMP, AS PER QSI 044 METHOD 6.2
7) WEIGHT: 2.79 lbs (1.26 KGS)
8) APPLY RTV SEALANT TO ALL FAYING SURFACES UPON ASSEMBLY
9) CUTTING EDGE INTENDED TO BE SHARP. DO NOT BREAK SHARP EDGE.

D4842-041 LOWER CUTTER ASSEMBLY

UNDER REVIEW

URF 16-692 WM
16-12-21

RELEASE
2013-10-31

B	CORRECT TOLERANCES (ZN B1-2) (ZN B1-3, D2-3) (ZN B7-5, D7-5)		DW	13.10.17		
A	NEW RELEASE		DB	13.05.23		
REV.	DESCRIPTION		BY	DATE		
DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA				
DRAWN	DW					
CHECKED	A.P.				DRAWING NO.	REV. B
MFG. APPR.	12				D4842	SHEET 1 OF 6
APPROVED	12				TITLE	SCALE
DE APPR.	12	LOWER CUTTER ASSY		NTS		
DATE	13.10.17		COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimension ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐								
		OTHER : _____							

		Supplier Concession				PAGE 1 of 2	PLANT Leonardo Helic. - Vergiate	
Supplier NC N.	AWC 006/01	Date	02.02.2017	AW Concession	400000061786	Purchase Order	4801373666	
P/N	6F9540V00231			Grade/Category	NC	Drawing Issue		
Part Description	PROTECTR, CCP ASSY LOWER			Batch Quantity	20,000	Defective Quantity	20,000	
AW NC	GUIDO BRUSCINO					A/C Type/Model	AW6	
Supplier	DART AEROSPACE LTD					Contract		
Defect FO01 - Wrong dimensions - * 02.02.2017 09:40:16 GUIDO BRUSCINO (40067) * see supplier document attached - B/N quantities and PO's listed in the Cause of Defect								
					Repetitiveness (same P/N - Defect Code)		NO ☒ YES ☐ Follow	
ENGINEERING Evaluation and Proposal								
Engineering Evaluations, including Specialist inputs:				Investigation Report n.		Compliance Report n.		
* 10.02.2017 18:01:48 MARCELLO STEFANELLI (9273) * The part is acceptable with the action proposed by the supplier applied.								
Classification of Deviation from Type Design i.a.w. EASA Part 21A.91 : Minore/B								
Defect effect						Limitations		
	Before Repair		After Repair					
Safety	☐ YES	☐ YES	☐ YES	☐ NO	☐ YES (to specificity) ☒ NO			
Life or Duration	☐ YES	☐ YES	☐ YES	☐ NO				
Strenght	☐ YES	☐ YES	☐ YES	☐ NO				
Performances	☐ YES	☐ YES	☐ YES	☐ NO				
Interchangeability	☐ YES	☐ YES	☐ YES	☐ NO				
Reliability	☐ YES	☐ YES	☐ YES	☐ NO				
Maintainability	☐ YES	☐ YES	☐ YES	☐ NO				
Installability	☒ YES	☐ YES	☒ YES	☐ NO				
Testability	☐ YES	☐ YES	☐ YES	☐ NO				
Only Appearance	☐ YES	☐ YES	☐ YES	☐ NO				
No Effect	☐ YES							
Repair Proposal:					Decision			
* 10.02.2017 18:01:48 MARCELLO STEFANELLI (9273) * See attached supplier document.					☐ Use rep. with spec.repair(not yet applied) ☒ Use repaired with known repair(yet applied) ☐ Use As Is ☐ Use repaired for tests only(see Limitations) ☐ Use As Is for tests only(see Limitations) ☐ Scrap			
Concession Classification		☐ MAJOR ☒ MINOR		Re-submit after Repair		☐ YES ☒ NO		
Mark part with Concession		☒ NO ☐ YES		Method :				
ATE	MARCELLO STEFANELLI			CPE			Date	10.02.2017
Checks and tests to be performed								
Repair registration		with repair WO		☒ Number:				
Repair Evaluation:								
Final Decision								
S/N	Use As Is (UTI)	Use Repaired (RIL)	Scrap (SCA)	S/N	Use As Is (UTI)	Use Repaired (RIL)	Scrap (SCA)	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
Not Serialized	Use As Is (Q.ty)	Use Repaired (Q.ty)	Scrap (Q.ty)					
Role	AW ATE	AW CPE	Inspection Clearance Repair	Quality	Customer	MoD or Authority Representative		
Signature	MARCELLO STEFANELLI							
Date	10.02.2017							



Supplier Concession

PAGE
2 of 2

PLANT
Leonardo Helic. - Vergiate

Supplier NC N.	AWC 006/01	Date	02.02.2017	AW	400000061786	Purchase Order	4801373666
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DEFECT 0001

FO01

Wrong dimensions

attachment

 AgustaWestland A Finmeccanica Company		CONCESSION				Pag. 1 of 2										
Manuf. Doc. N.	AWC 006	Date		AW Doc. N.		Purchase Order	4800671131 4800722284 4801147764 4801186922 4801218851 4801288960 4801373666									
AW P/N	6F9540V00231	S/N / Batch Number	B109195 Qty. (1) B133355 Qty. (2) B134314 Qty. (1) B134315 Qty. (1) B134842 Qty. (1) B137492 Qty. (1) B137355 Qty. (2) B137816 Qty. (1) B137818 Qty. (1) B137817 Qty. (1) B140379 Qty. (3) B140381 Qty. (2) B147002 Qty. (2) B150786 Qty. (1)	Grade	A	AW Drawing Issue	B									
Description	Lower Cutter Assy			Batch Qty	20	Defective Qty	20									
Manufacturer	Dart Aerospace			Model	AW169											
Defect(s) Description																
Leonardo has informed Dart that there are interference issues installing the lower cable cutter D4842-041 onto the Leonardo interface bracket.																
				<table border="1"> <tr> <th>Department</th> <th>Inspector</th> <th>Signature</th> <th>Date</th> </tr> <tr> <td>Quality</td> <td>DAS 16 9-89</td> <td></td> <td>2017/02/01</td> </tr> </table>	Department	Inspector	Signature	Date	Quality	DAS 16 9-89		2017/02/01				
Department	Inspector	Signature	Date													
Quality	DAS 16 9-89		2017/02/01													
Defect(s) Cause																
The Lower Cutter body has a dimension of 10.9 +0.25/-0.00 mm. This dimension was reported as part of the approved FAI and has been met with all delivered product.																
				<table border="1"> <tr> <th>Department</th> <th>Inspector</th> <th>Signature</th> <th>Date</th> </tr> <tr> <td>Quality</td> <td>DAS 16 9-89</td> <td></td> <td>2017/02/01</td> </tr> </table>	Department	Inspector	Signature	Date	Quality	DAS 16 9-89		2017/02/01				
Department	Inspector	Signature	Date													
Quality	DAS 16 9-89		2017/02/01													
Corrective Action						Complete Before										
In order to mitigate the interference issue for Leonardo, Dart is proposing to remove sufficient material to make the overall installation dimension at 22.15 mm +0.05/-0.35.																
				<table border="1"> <tr> <th>Department</th> <th>Inspector</th> <th>Signature</th> <th>Date</th> </tr> <tr> <td>Quality</td> <td>DAS 16 9-89</td> <td></td> <td>2017/02/01</td> </tr> </table>	Department	Inspector	Signature	Date	Quality	DAS 16 9-89		2017/02/01				
Department	Inspector	Signature	Date													
Quality	DAS 16 9-89		2017/02/01													



For "MANUFACTURER" SUPPLIERS ONLY

ENGINEERING evaluation and proposal

Engineering evaluation

Investigation report
Compliance report

n.....
n.....

Dart's position is that this change will not impact the structural substantiation presented in Report DA169-4 for the lower cutter body since this is not a section with the lowest margin. Therefore removing 0.3 mm max from each part will not impact the structural integrity of the lower cutter assembly. The dimension on the cutter body part D4842-3/-4 will be 10.80 +0.00/-0.200.

The dimension change of the two lower cutter body parts mating, plus the sealant, anodize and primer layers will be defined as a dimension of 22.15 +0.05/-0.35 mm on the assembled lower cutterbody and will be incorporated into the D4842 drawing for inspection.

Defect effects			Limitations
	Before any repair	After any repair	
Safety	☐ yes	☐ yes ☐ no	☐ yes (specify) ☒ no
Life	☐ yes	☐ yes ☐ no	
Strength	☐ yes	☐ yes ☐ no	
Performances	☐ yes	☐ yes ☐ no	
Interchangeability	☐ yes	☐ yes ☐ no	
Reliability	☐ yes	☐ yes ☐ no	
Maintainability	☐ yes	☐ yes ☐ no	
Installability	☒ yes	☐ yes ☒ no	
Testability	☐ yes	☐ yes ☐ no	
Only aspect	☐ yes	☐ yes ☐ no	
Repair Proposal None			Decision to use ☐ Use repaired with specific repair ☐ Use repaired with known repair ☐ Use as is ☐ Use repaired for tests (see Limitations) ☐ Use as is for tests (see Limitations) ☒ Scrap
Concession Classification ☒ Major ☐ Minor		Submit after repair ☐ yes ☐ no	

Work Order ID 164957

Thursday, August 10, 2017 12:52:46 PM

164957

Ship Sept 29
U/R

Page 1

Item ID: D4842-3 Accept *N9000040100* Setup Start *NS1*
Revision ID: URF 16-692 Stop *NS2*
Item Name: Lower Cutter Body, LH

Start Date: 8/21/2017 Start Qty: 4.00 *4* Cust Item ID:

Required Date: 9/7/2017 Req'd Qty: 4.00 *4* Customer:

Reference:

Approvals: Process Plan:  Date: AUG 10 2017 Tooling: Date:
QC: Date: SPC (Y/N): Date: Manufacture to Concession 400000061786

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4842	B U/R OK

9/17/19/22

100	BAND SAW	0.00
100		
Bandsaw	Memo	0.36
Jeaspa Bandsaw	Cut Blank at 7.250"	

110	HAAS CNC VERTICAL MACHINING #1	0.00
110		
HAAS 1	Memo	2.46
HAAS CNC vertical machine #1	1-Machine per folio FB192 DWG REV: B FOLIO REV: RA	

2- deburr and break all sharp edges

DAS 1 17-08-17
9-89
DAS 14 17-08-17
9-89
S.C. 17/08/19
17-08-18
P10-L

QA Closed: 17-08-18 Date: 17-08-18
 Date: SEP 29 2017

WORK ORDER NON-CONFORMANCE / UPDATE



Work Order update only ☐

Work Order: <u>164957</u> Part No. <u>D4842-3</u> NCR No. <u>17-6629</u>		DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☒ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☒ Rec/Store/Packaging Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date: <u>17-08-18</u>		Step #: <u>110</u>		QTY Effective: <u>1</u>		MRB (QSI042) Approval DAS 9-89 17-09-15			
Description Work Order Deviation				Disposition		Completed By DAS 1 17-08-18 9-89			
5/8 cougner broke in part while the roughing cycle was being run. The cutter had normal wear on it and took a pass with 75% of the cutter with result as the cutter breaking wch affected .100 deep of the finished part in BG area on drawing				=> We added a clearance hole in this exact area before the mentioned roughing cycle => Program has been updated <u>DFS</u> 17/09/28 Scrap n replace B#: M138086		Lead hand / Supervisor Approval Ver <u>08</u> 9-89 17-08-18			
Root Cause Environment ☐ Design ☐ Doc/Data ☒ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☒ Past Due ☐				FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☒ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				QC / QA Coordinator Approval DAS 9-89 17-09-15	
OTHER :									

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Page 2

Stop *NS2*

Reference:

Stop ***NR2***

0.00

0.00

0.00

Certification of Conformity is required

7/5

AUG 25 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐								
Misidentified	☐	Past Due	☐	OTHER :							

Work Order ID 164957

164957

Page 3

Thursday, August 10, 2017 12:52:46 PM

Item ID: D4842-3 Accept *N900040100* Setup Start *NS1*
 Revision ID: URF 16-692 Stop *NS2*
 Item Name: Lower Cutter Body, LH
 Start Date: 8/21/2017 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 9/7/2017 Req'd Qty: 4.00 *4* Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Receive & Inspect for Damage & Mat'l Certs	0.00							
150									
Packaging	Memo	0.00							
Packaging									
155	QCS- Inspect part completeness to step on W/O	0.00							
155									
QC	Memo	0.00							
Quality Control									
180	Identify as per dwg & Stock Location: CCK128	0.00							
180									
Packaging	Memo	0.00							
Packaging	***IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER***								

SEP 15 2017 4
 DAS 6
 9-89

SEP 18 2017 4
 DAS 6
 9-89

SEP 18 2017 4
 DAS 26
 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Work Order ID 164957***164957***

Page 4

Thursday, August 10, 2017 12:52:46 PM

Item ID: D4842-3 Accept *N900040100* Setup Start *NS1*
Revision ID: URF 16-692 Stop *NS2*
Item Name: Lower Cutter Body, LH

Start Date: 8/21/2017 Start Qty: 4.00 *4* Cust Item ID:
Required Date: 9/7/2017 Req'd Qty: 4.00 *4* Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start *NR1*
QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21 - Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

SEP 18 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
OTHER : _____							

Picklist Print

Page 1

Thursday, August 10, 2017 12:52:46 PM

Work Order ID: 164957

164957

Parent Item: D4842-3

D4842-3

Parent Item Name: Lower Cutter Body, LH

Start Date: 8/21/2017

Required Date: 9/7/2017

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP REV: A NEW ISSUE JFS 13/04/30 VERIFY BY: JLM
17.06.27 Change Mat. as per ECN17-574 DP verify DD

IPP Rev.B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M7075T6S1.000X5.000

Purchased

No

100

f

24.0000

0.605

2.547368

DAS

1

9-89

17-08-17

M7075T6S1 000X5 000

7075-T6 Sheet 1" Thick Plate x 5" Wide

**

Location

Loc Qty

Loc Code

MAT005

24

→ m137781

12

→ m138086

12

2.43

0.608

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
				OTHER : ☐			

DART AEROSPACE LTD		Work Order:	164987
Description: Lower Cutter Body, LH		Part Number:	D4842-3
Inspection Dwg: D4842	Rev: B	Page 1 of 1	

INSPECTION SHEET

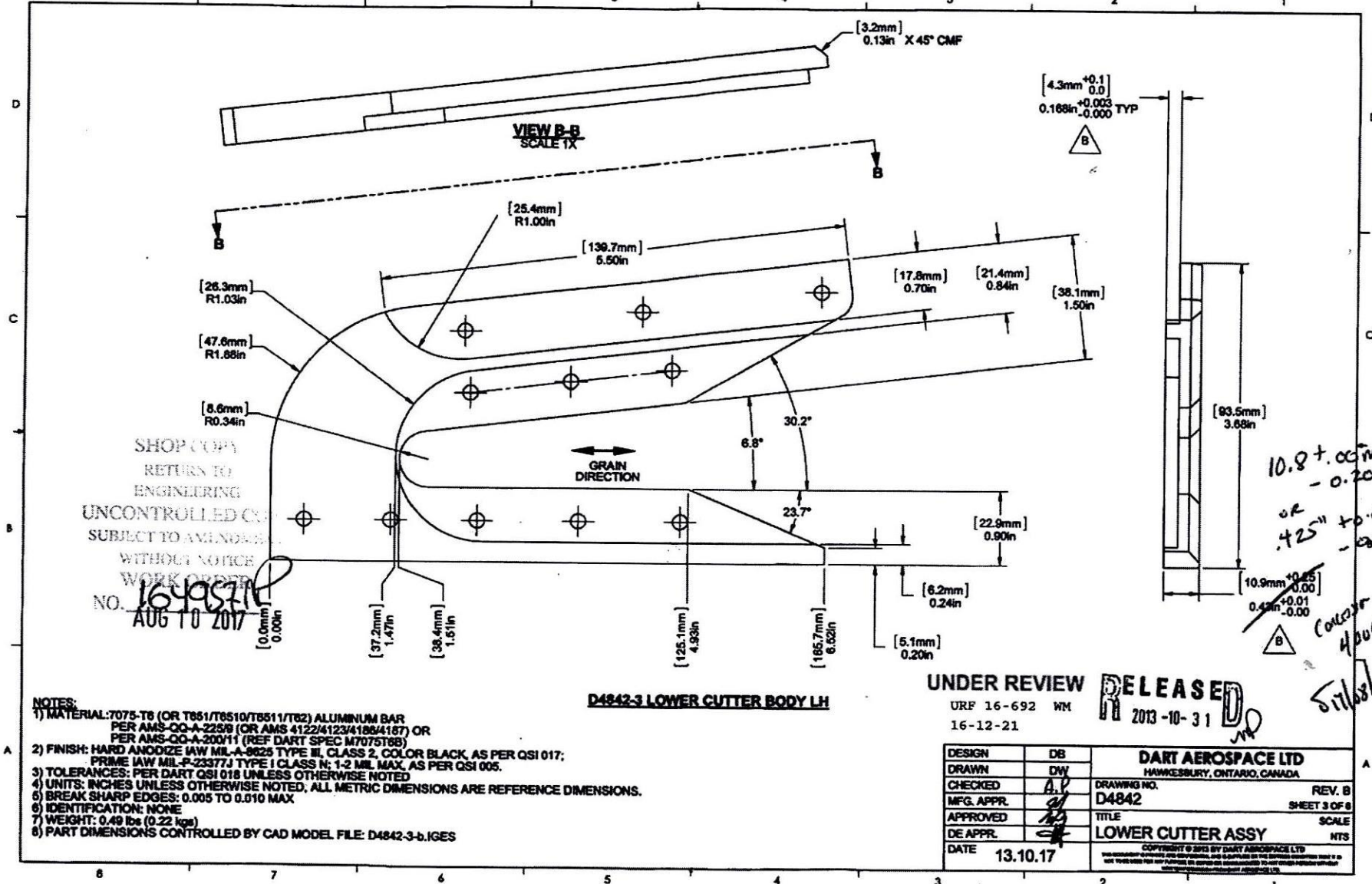
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.13 x 45°	+/-0.030 x +/-0.5°	0.130	✓		Kt-05	verm.
0.168	+0.003/-0.000					
3.68	+/-0.030	3.680	✓		Kt-05	verm.
0.43	+0.010/-0.000					
1.50	+/-0.030	1.500	✓		Kt-05	verm.
0.84	+/-0.030	0.845	✓		31006	H-G
0.70	+/-0.030	0.7015	✓		31006	H-G
5.50	+/-0.030	5.500	✓		Kt-05	verm.
1.47	+/-0.030	1.470	✓		Kt-05	verm.
1.51	+/-0.030	1.512	✓		Kt-05	verm.
4.93	+/-0.030	4.930	✓		"	"
6.52	+/-0.030	6.523	✓		"	"
0.20	+/-0.030	0.200	✓		"	"
0.24	+/-0.030	0.246	✓		"	"
0.90	+/-0.030	0.900	✓		Kt-05	verm.
23.7°	+/-0.5°	23.7°	✓		CNC-17	A-G
6.8°	+/-0.5°	6.8°	✓		"	"
30.2°	+/-0.5°	30.2°	✓		"	"
0.360	+/-0.010	0.363	✓		Kt-05	verm.
4.580	+/-0.010	4.580	✓		31006	H-G
4.220	+/-0.005	4.220	✓		"	"
2.110	+/-0.005	2.110	✓		"	"
0.501	+/-0.010	0.500	✓		"	"
4.830	+/-0.010	4.830	✓		"	"
4.440	+/-0.005	4.440	✓		"	"
3.420	+/-0.005	3.420	✓		"	"
2.400	+/-0.005	2.400	✓		"	"
1.200	+/-0.005	1.200	✓		"	"
Ø0.177	+0.005/-0.001	0.177	✓		Kt-05	verm.
2.400	+/-0.005	2.400	✓		"	"
4.601	+/-0.010	4.601	✓		"	"
0.400	+/-0.010	0.400	✓		"	"

Measured by:	DAS 1	Checked by:	DAS 49	QC Inspector:	
Date:	9-89 17-08-18	Date:	17/08/22	Date:	

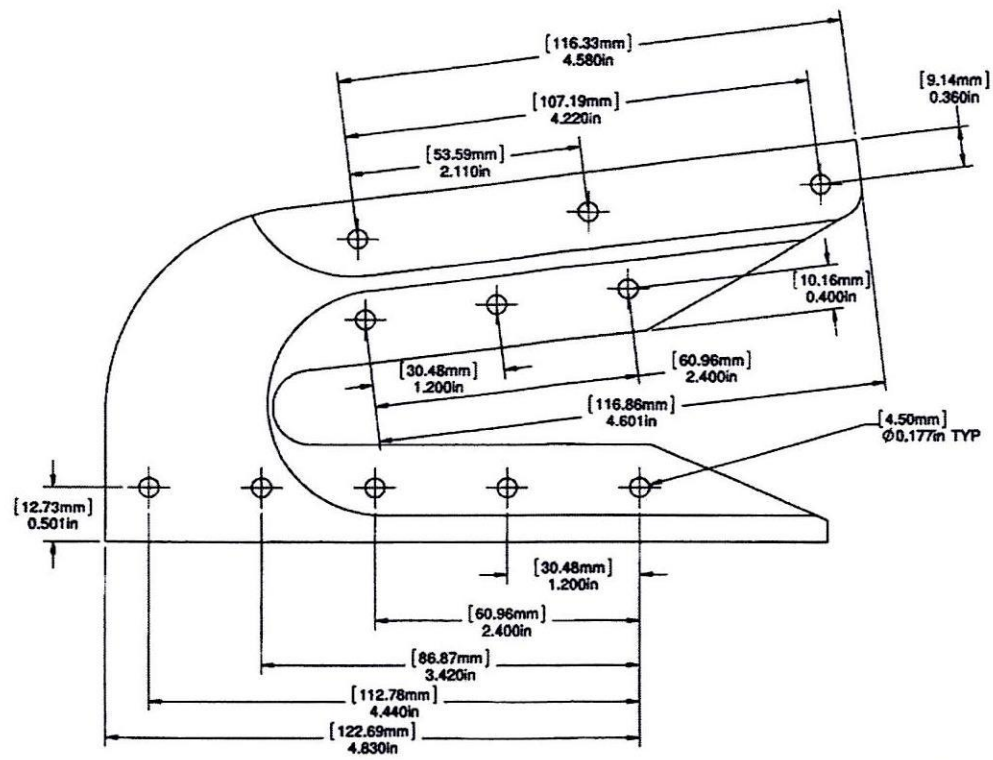
Engineering Approval: (If necessary)		Date:	
--	--	--------------	--

Rev	Date	Change	Revised by	Approved
A	15.10.14	New Issue	KJ	

8 7 6 5 4 3 2 1



8 7 6 5 4 3 2 1



D4842-3 LOWER CUTTER BODY LH
(AUXILIARY VIEW)

UNDER REVIEW

URF 16-692 WM

16-12-21

RELEASE
2013-10-31

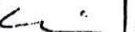
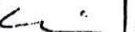
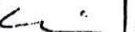
DESIGN	DB	DART AEROSPACE LTD	
DRAWN	DW	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>A.P.</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D4842	SHEET 4 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	LOWER CUTTER ASSY	NTS
DATE	13.10.17	COPYRIGHT © 2013 BY DART AEROSPACE LTD	

		Supplier Concession				PAGE 1 of 2	PLANT Leonardo Helic. - Vergiate
Supplier NC N.	AWC 006/01	Date	02.02.2017	AW Concession	400000061786	Purchase Order	4801373666
P/N	6F9540V00231			Grade/Category	NC	Drawing Issue	
Part Description	PROTECTR, CCP ASSY LOWER			Batch Quantity	20,000	Defective Quantity	20,000
AW NC	GUIDO BRUSCINO			A/C Type/Model	AW6		
Supplier	DART AEROSPACE LTD			Contract			
Defect FO01 - Wrong dimensions - * 02.02.2017 09:40:16 GUIDO BRUSCINO (40067) * see supplier document attached - B/N quantities and PO's listed in the Cause of Defect							
				Repetitiveness (same P/N - Defect Code)		NO ☒	YES ☐ Follow
ENGINEERING Evaluation and Proposal							
Engineering Evaluations, including Specialist inputs:				Investigation Report n.		Compliance Report n.	
* 10.02.2017 18:01:48 MARCELLO STEFANELLI (9273) * The part is acceptable with the action proposed by the supplier applied.							
Classification of Deviation from Type Design i.a.w. EASA Part 21A.91 : Minore/B							
Defect effect				Limitations			
	Before Repair	After Repair					
Safety	☐ YES	☐ YES	☐ NO	☐ YES (to specificity) ☒ NO			
Life or Duration	☐ YES	☐ YES	☐ NO				
Streight	☐ YES	☐ YES	☐ NO				
Performances	☐ YES	☐ YES	☐ NO				
Interchangeability	☐ YES	☐ YES	☐ NO				
Reliability	☐ YES	☐ YES	☐ NO				
Maintainability	☐ YES	☐ YES	☐ NO				
Installability	☒ YES	☐ YES	☒ NO				
Testability	☐ YES	☐ YES	☐ NO				
Only Appearance	☐ YES	☐ YES	☐ NO				
No Effect	☐ YES	☐ YES	☐ NO				
Repair Proposal:				Decision			
* 10.02.2017 18:01:48 MARCELLO STEFANELLI (9273) * See attached supplier document.				☐ Use rep. with spec.repair(not yet applied) ☒ Use repaired with known repair(yet applied) ☐ Use As Is ☐ Use repaired for tests only(see Limitations) ☐ Use As Is for tests only(see Limitations) ☐ Scrap			
Concession Classification		☐ MAJOR ☒ MINOR		Re-submit after Repair		☐ YES ☒ NO	
Mark part with Concession		☒ NO ☐ YES		Method :			
ATE	MARCELLO STEFANELLI			CPE		Date	10.02.2017
Checks and tests to be performed							
Repair registration		with repair WO ☒		Number:			
Repair Evaluation:							
Final Decision							
S/N	Use As Is (UTI)	Use Repaired (R/L)	Scrap (SCA)	S/N	Use As Is (UTI)	Use Repaired (R/L)	Scrap (SCA)
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
Not Serialized	Use As Is (Q.ty)		Use Repaired (Q.ty)		Scrap (Q.ty)		
Role	AW ATE	AW CPE	Inspection Clearance Repair	Quality	Customer	MoD or Authority Representative	
Signature	MARCELLO STEFANELLI						
Date	10.02.2017						

		Supplier Concession			PAGE 2 of 2	PLANT Leonardo Helic. - Vergiate	
Supplier NC N.	AWC 006/01	Date	02.02.2017	AW	400000061786	Purchase Order	4801373666
DEFECT 0001							
		FO01	Wrong dimensions				
attachment							

CONCESSION

Pag.
1 of 2

Manuf. Doc. N.	AWC 006	Date		AW Doc. N.		Purchase Order	4800671131 4800722284 4801147764 4801186922 4801218851 4801288960 4801373666								
AW P/N	6F9540V00231	S/N / Batch Number	B109195 Qty. (1) B133355 Qty. (2) B134314 Qty. (1) B134315 Qty. (1) B134842 Qty. (1) B137492 Qty. (1) B137355 Qty. (2) B137816 Qty. (1) B137818 Qty. (1) B137817 Qty. (1) B140379 Qty. (3) B140381 Qty. (2) B147002 Qty. (2) B150786 Qty. (1)	Grade	A	AW Drawing Issue	B								
Description	Lower Cutter Assy			Batch Qty	20	Defective Qty	20								
Manufacturer	Dart Aerospace			Model	AW169										
Defect(s) Description															
Leonardo has informed Dart that there are interference issues installing the lower cable cutter D4842-041 onto the Leonardo Interface bracket.															
<table border="1"> <thead> <tr> <th>Department</th> <th>Inspector</th> <th>Signature</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Quality</td> <td>DAS 16 9-89</td> <td></td> <td>2017/02/01</td> </tr> </tbody> </table>								Department	Inspector	Signature	Date	Quality	DAS 16 9-89		2017/02/01
Department	Inspector	Signature	Date												
Quality	DAS 16 9-89		2017/02/01												
Defect(s) Cause															
The Lower Cutter body has a dimension of 10.9 +0.25/-0.00 mm. This dimension was reported as part of the approved FAI and has been met with all delivered product.															
<table border="1"> <thead> <tr> <th>Department</th> <th>Inspector</th> <th>Signature</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Quality</td> <td>DAS 16 9-89</td> <td></td> <td>2017/02/01</td> </tr> </tbody> </table>								Department	Inspector	Signature	Date	Quality	DAS 16 9-89		2017/02/01
Department	Inspector	Signature	Date												
Quality	DAS 16 9-89		2017/02/01												
Corrective Action															
In order to mitigate the interference issue for Leonardo, Dart is proposing to remove sufficient material to make the overall installation dimension at 22.15 mm +0.05/-0.35.															
<table border="1"> <thead> <tr> <th>Department</th> <th>Inspector</th> <th>Signature</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Quality</td> <td>DAS 16 9-89</td> <td></td> <td>2017/02/01</td> </tr> </tbody> </table>								Department	Inspector	Signature	Date	Quality	DAS 16 9-89		2017/02/01
Department	Inspector	Signature	Date												
Quality	DAS 16 9-89		2017/02/01												



For "MANUFACTURER" SUPPLIERS ONLY

ENGINEERING evaluation and proposal

Engineering evaluation

Investigation report
Compliance report

n.....
n.....

Dart's position is that this change will not impact the structural substantiation presented in Report DA169-4 for the lower cutter body since this is not a section with the lowest margin. Therefore removing 0.3 mm max from each part will not impact the structural integrity of the lower cutter assembly. The dimension on the cutter body part D4842-3/-4 will be 10.80 +0.00/-0.200.

The dimension change of the two lower cutter body parts mating, plus the sealant, anodize and primer layers will be defined as a dimension of 22.15 +0.05/-0.35 mm on the assembled lower cutterbody and will be incorporated into the D4842 drawing for inspection.

	Defect effects		Limitations
	Before any repair	After any repair	
	☐ yes	☐ yes ☐ no	☐ yes (specify) ☒ no
Safety	☐ yes	☐ yes ☐ no	
Life	☐ yes	☐ yes ☐ no	
Strength	☐ yes	☐ yes ☐ no	
Performances	☐ yes	☐ yes ☐ no	
Interchangeability	☐ yes	☐ yes ☐ no	
Reliability	☐ yes	☐ yes ☐ no	
Maintainability	☐ yes	☐ yes ☐ no	
Installability	☒ yes	☐ yes ☒ no	
Testability	☐ yes	☐ yes ☐ no	
Only aspect	☐ yes	☐ yes ☐ no	
Repair Proposal		Decision to use	
None		☐ Use repaired with specific repair ☐ Use repaired with known repair ☐ Use as is ☐ Use repaired for tests (see Limitations) ☐ Use as is for tests (see Limitations) ☒ Scrap	
Concession Classification		☒ Major ☐ Minor	Submit after repair ☐ yes ☐ no



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 913851

Date: 14-Sep-17

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

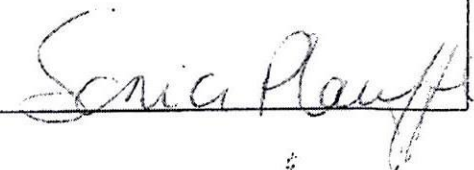
Chantal Lavoie
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.			
11 ea	Part: 647.9710 Lower Body Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils). Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (.1 - 2 mils) per drawing. Job: 21630	Rev: A1	PO: PO37552 Line: 10
7 ea	Part: 647.1611 Wiper Deflector, Aft Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils). Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils). Job: 21623	Rev: A	PO: PO37552 Line: 3
4 ea	Part: D4842-3 Lower Cutter Body, LH Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils). Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (.1 - 2 mils) per drawing. Job: 21624	Rev: B	PO: PO37552 Line: 4
4 ea	Part: D4842-4 Lower Cutter Body, RH Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils). Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (.1 - 2 mils) per drawing. Job: 21625	Rev: B	PO: PO37552 Line: 5
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>12/07/2017</u>			
Made in Canada. 			



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO37552

Purchase Order Date 8/25/2017
PO Print Date 8/29/2017

Page Number 2 of 7

Order From :

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

VC-ATG001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 613-446-4544

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Diane Baker

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency CAD

FOB FCA - (Free Carrier)

3	164932	647.1611 Wiper Deflector, Alt	9/13/2017	6.00	\$10.70	\$64.
			Yes			
			9/13/2017			

As per Dwg 647.1600 Rev A
Hard Anodize IAW MIL-A-8625F, Type III, Class 2, Color Black; Prime IAW MIL-PRF-23377, Type I, Class N

Line Total: \$64.

4	164937	D4842-3 Lower Cutter Body, LH	9/13/2017	4.00	\$10.25	\$41.
			Yes			
			9/13/2017			

As per Dwg D4842
Rev B U/R
Hard Anodize IAW MIL-A-8625, Type III, Class 2, Color Black; Prime IAW MIL-P-23377, Type I, Class N, 1-2 mil max

Line Total: \$41.

5	164958	D4842-4 Lower Cutter Body, RH	9/13/2017	4.00	\$10.25	\$41.
			Yes			
			9/13/2017			

As per Dwg D4842
Rev B U/R
Hard Anodize IAW MIL-A-8625, Type III, Class 2, Color Black; Prime IAW MIL-P-23377, Type I, Class N, 1-2 mil max

SEP 15 2017

PO Instructions: PRIMER IS SUPPLIED BY DART

Note:

8/29/2017

Work Order ID 164958

164958

Thursday, August 10, 2017 12:53:22 PM

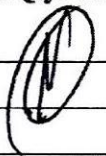
U/R ^{Ship Sept 29} Page 1

Item ID: D4842-4 Accept *N900040100* Setup Start *NS1*
 Revision ID: URF 16-692 Stop *NS2*
 Item Name: Lower Cutter Body, RH

Start Date: 8/21/2017 Start Qty: 4.00 *4* Cust Item ID:

Required Date: 9/7/2017 Req'd Qty: 4.00 *4* Customer:

Reference:

Approvals: Process Plan:  Date: AUG 10 2017 Tooling: Date:
 QC: Date: SPC (Y/N): Date:
17 holes Manufacture to concession 400000061786

Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4842	B UR <i>OK 17/9/22</i>								
100	BAND SAW	0.00							DAS 1 9-89 17-08-17
100									
Bandsaw	Memo	0.01							
Jeaspa Bandsaw	Cut Blank at 7.250"								
110	HAAS CNC VERTICAL MACHINING #1	0.62							DAS 14 S.C. 9-89 17/08/19
110									
HAAS I	Memo	1.57							
HAAS CNC vertical machine #1	1-Machine per folio FB192 DWG REV: <i>B L R</i> FOLIO REV: <i>XX</i>								

2- deburr and break all sharp edges

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																	
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Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																																																																	
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OTHER : _____																																																																					

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Page 2

Setup Start *NS1*
Stop *NS2*

4

Cust Item ID:
Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed:

Date:

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Description Work Order Deviation				Disposition					
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		OTHER : _____							

Work Order ID 164958***164958***

Page 4

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Item ID: D4842-4 Accept *N900040100* Setup Start *NS1*
Revision ID: URF 16-692 Stop *NS2*
Item Name: Lower Cutter Body, RH
Start Date: 8/21/2017 Start Qty: 4.00 *4* Cust Item ID:
Required Date: 9/7/2017 Req'd Qty: 4.00 *4* Customer:
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start *NR1*
QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21 - Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

SEP 18 2017

DAS
21
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Page 1

Work Order ID: 164958

164958

Parent Item: D4842-4

D4842-4

Parent Item Name: Lower Cutter Body, RH

Start Date: 8/21/2017

Required Date: 9/7/2017

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP REV: A NEW ISSUE JFS 13/04/30 VERIFY BY: JLM
17.06.27 Change Mat. as per ECN17-574 DP verify DD

IPP Rev.B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M7075T6S1.000X5.000		Purchased	No			100	f	24.0000	0.605	2.547368			
									**			DAS 1 9-89	17-08-17
M7075T6S1 000X5 000													
7075-T6 Sheet1" Thick Plate x 5" Wide													

Location

Loc Qty

Loc Code

MAT005

24

→ m137781

12

→ m138086

12

1.623

0.608

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____ Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																	
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Description Work Order Deviation				Disposition				Completed By																																																																	
Root Cause				FAULT CATEGORY																																																																					
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DART AEROSPACE LTD		Work Order:	164958
Description: Lower Cutter Body, RH		Part Number:	D4842-4
Inspection Dwg: D4842	Rev: B	Page 1 of 1	

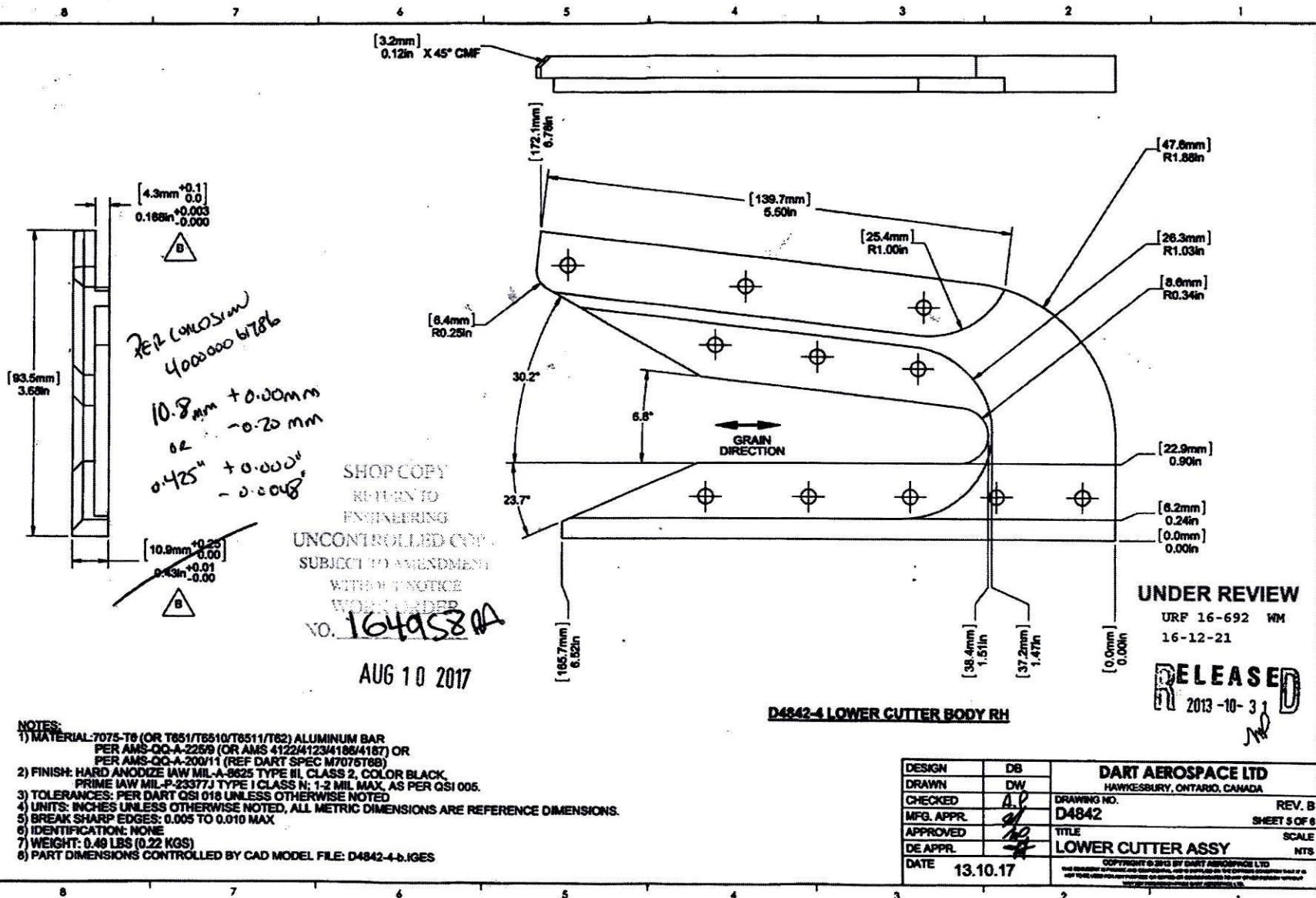
INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.12 x 45°	+/-0.030 x +/-0.5°	0.125 x 45°	V		H.G.	
0.168	+0.003/-0.000	.168	V		H.G.	
3.68	+/-0.030	3.677	V		H.G.	
0.168	+0.003/-0.000	.168	V		H.G.	
0.43	+0.010/-0.000					
5.50	+/-0.030	5.500	V		H.G.	
6.78	+/-0.030	6.778	V		H.G.	
6.52	+/-0.030	6.522	V		H.G.	
1.51	+/-0.030	1.515	V		H.G.	
1.47	+/-0.030	1.466	V		H.G.	
0.24	+/-0.030	.245	V		H.G.	
0.90	+/-0.030	.900	V		"	
4.580	+/-0.010	4.582	V		"	
4.220	+/-0.005	4.222	V		"	
2.110	+/-0.005	2.112	V		"	
2.400	+/-0.005	2.402	V		"	
1.200	+/-0.005	1.202	V		"	
0.400	+/-0.010	.400	V		"	
4.601	+/-0.010	4.600	V		H.G.	
Ø0.177	+0.005/-0.001	.177	V		G.P.	
6.133	+/-0.010	6.132	V		H.G.	
4.440	+/-0.005	4.438	V		H.G.	
3.240	+/-0.005	3.238	V		H.G.	
2.040	+/-0.005	2.038	V		H.G.	
1.020	+/-0.005	1.019	V		H.G.	
0.501	+/-0.010	0.502	V		H.G.	
30.2°	+/-0.5°	30.1°	V		A.G.	
23.7°	+/-0.5°	23.8°	V		A.G.	
6.8°	+/-0.5°	6.7°	V		A.G.	
0.425"	+0.000"/-0.0048"	.424	V		H.G.	

Measured by: S.C.	Checked by: DAS	QC Inspector:
Date: 17/08/19	Date: 17/08/22	Date:

Engineering Approval: (If necessary)	Date:
--	--------------

Rev	Date	Change	Revised By	Approved
A	15.10.26	New Issue	KJ	



SHOP COPY
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITH NOTICE
WORK UNDER
NO. 1649580A

AUG 10 2017

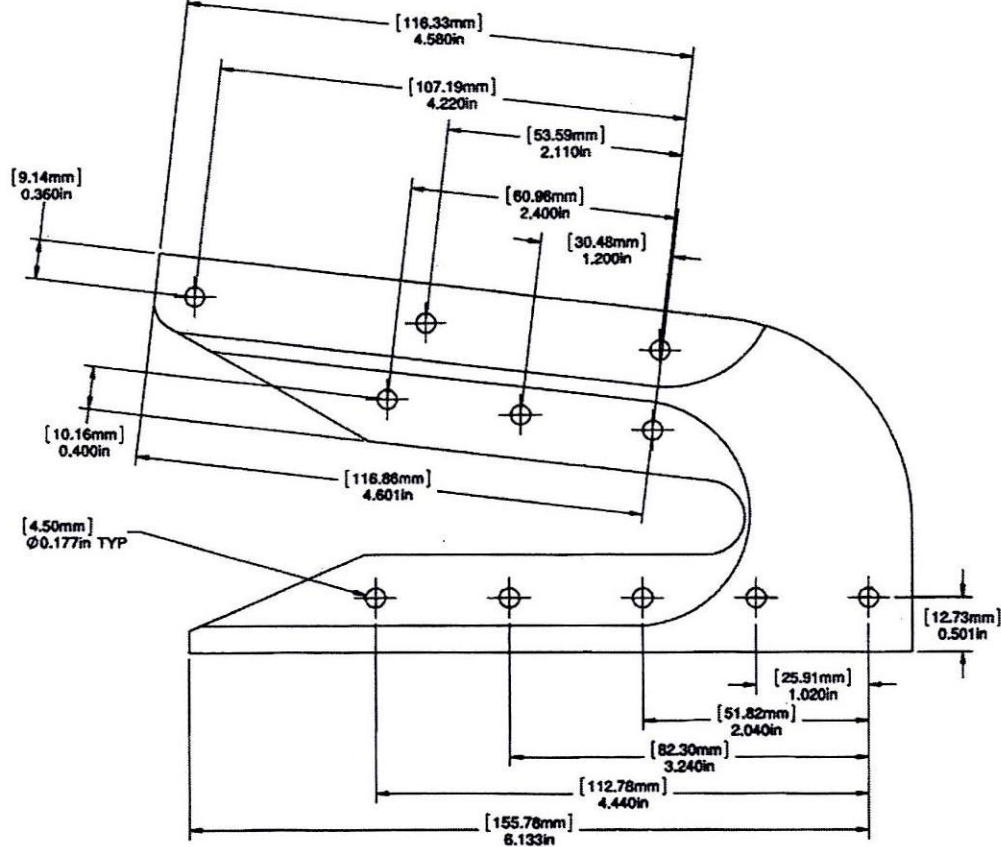
UNDER REVIEW
URF 16-692 WM
16-12-21

RELEASED
2013-10-31

D4842-4 LOWER CUTTER BODY RH

- NOTES:
- 1) MATERIAL: 7075-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR
PER AMS-QQ-A-228/9 (OR AMS 4122/4123/4186/4187) OR
PER AMS-QQ-A-200/11 (REF DART SPEC M7075T6B)
 - 2) FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE II, CLASS 2, COLOR BLACK,
PRIME IAW MIL-P-23377 TYPE I CLASS II; 1-2 MIL MAX, AS PER QSI 005.
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED, ALL METRIC DIMENSIONS ARE REFERENCE DIMENSIONS.
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.48 LBS (0.22 KGS)
 - 8) PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: D4842-4-b.IGES

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DW		
CHECKED	AP	DRAWING NO. D4842	REV. B
MFG. APPR.	AP	SHEET 5 OF 6	
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	LOWER CUTTER ASSY	NTS
DATE	13.10.17	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND IS NOT TO BE RELEASED FOR PUBLICATION OR DISTRIBUTION TO THE PUBLIC WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD	



UNDER REVIEW

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16-12-21

RELEASED
2013-10-31

D4842-4 LOWER CUTTER BODY RH
(AUXILIARY VIEW)

DESIGN	DB	DART AEROSPACE LTD	
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CHECKED	AP	DRAWING NO.	REV. B
MFG. APPR.	AP	D4842	SHEET 6 OF 6
APPROVED	AP	TITLE	SCALE
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Supplier NC N.		AWC 006/01		Date	02.02.2017		AW Concession	400000061786		Purchase Order	4801373666																																																																																								
P/N		6F9540V00231				Grade/Category	NC		Drawing Issue																																																																																										
Part Description		PROTECTR, CCP ASSY LOWER				Batch Quantity	20,000		Defective Quantity	20,000																																																																																									
AW NC		GUIDO BRUSCINO				A/C Type/Model	AW6																																																																																												
Supplier		DART AEROSPACE LTD				Contract																																																																																													
Defect FO01 - Wrong dimensions - * 02.02.2017 09:40:16 GUIDO BRUSCINO (40067) * see supplier document attached - B/N quantities and PO's listed in the Cause of Defect																																																																																																			
Repetitiveness (same P/N - Defect Code)										NO ☒ YES ☐																																																																																									
ENGINEERING Evaluation and Proposal Engineering Evaluations, including Specialist inputs:																																																																																																			
* 10.02.2017 18:01:48 MARCELLO STEFANELLI (9273) * The part is acceptable with the action proposed by the supplier applied.				Investigation Report n.				Compliance Report n.																																																																																											
Classification of Deviation from Type Design I.a.w. EASA Part 21A.91 : Minore/B																																																																																																			
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		Supplier Concession			PAGE 2 of 2	PLANT Leonardo Helic. - Vergiate	
Supplier NC N.	AWC 006/01	Date	02.02.2017	AW	400000061786	Purchase Order	4801373666
DEFECT 0001							FO01
attachment							Wrong dimensions

 AgustaWestland A Finmeccanica Company		CONCESSION				Pag. 1 of 2	
Manuf. Doc. N.	AWC 006	Date		AW Doc. N.		Purchase Order	4800671131 4800722284 4801147764 4801186922 4801218851 4801288960 4801373666
AW P/N	6F9540V00231	S/N / Batch Number	B109195 Qty. (1) B133355 Qty. (2) B134314 Qty. (1) B134315 Qty. (1) B134842 Qty. (1) B137492 Qty. (1) B137355 Qty. (2) B137816 Qty. (1) B137818 Qty. (1) B137817 Qty. (1) B140379 Qty. (3) B140381 Qty. (2) B147002 Qty. (2) B150786 Qty. (1)	Grade	A	AW Drawing Issue	B
Description	Lower Cutter Assy			Batch Qty	20	Defective Qty	20
Manufacturer	Dart Aerospace			Model	AW169		
Defect(s) Description							
Leonardo has informed Dart that there are interference issues installing the lower cable cutter D4842-041 onto the Leonardo Interface bracket.							
				Department	Inspector	Signature	Date
				Quality	16 9-89		20.7/02/01
Defect(s) Cause							
The Lower Cutter body has a dimension of 10.9 +0.25/-0.00 mm. This dimension was reported as part of the approved FAI and has been met with all delivered product.							
				Department	Inspector	Signature	Date
				Quality	16 9-89		20.7/02/01
Corrective Action						Complete Before	
In order to mitigate the interference issue for Leonardo, Dart is proposing to remove sufficient material to make the overall installation dimension at 22.15 mm +0.05/-0.35.							
				Department	Inspector	Signature	Date
				Quality	16 9-89		20.7/02/01

For "MANUFACTURER" SUPPLIERS ONLY

ENGINEERING evaluation and proposal

Engineering evaluation

Investigation report

n.....

Compliance report

n.....

Dart's position is that this change will not impact the structural substantiation presented in Report DA169-4 for the lower cutter body since this is not a section with the lowest margin. Therefore removing 0.3 mm max from each part will not impact the structural integrity of the lower cutter assembly. The dimension on the cutter body part D4842-3/-4 will be 10.80 +0.00/-0.200.

The dimension change of the two lower cutter body parts mating, plus the sealant, anodize and primer layers will be defined as a dimension of 22.15 +0.05/-0.35 mm on the assembled lower cutterbody and will be incorporated into the D4842 drawing for inspection.

	Defect effects		Limitations
	Before any repair	After any repair	
	☐ yes	☐ yes ☐ no	☐ yes (specify) ☒ no
Safety	☐ yes	☐ yes ☐ no	
Life	☐ yes	☐ yes ☐ no	
Strength	☐ yes	☐ yes ☐ no	
Performances	☐ yes	☐ yes ☐ no	
Interchangeability	☐ yes	☐ yes ☐ no	
Reliability	☐ yes	☐ yes ☐ no	
Maintainability	☐ yes	☐ yes ☐ no	
Installability	☒ yes	☐ yes ☒ no	
Testability	☐ yes	☐ yes ☐ no	
Only aspect	☐ yes	☐ yes ☐ no	
Repair Proposal		Decision to use	
None		☐ Use repaired with specific repair ☐ Use repaired with known repair ☐ Use as is ☐ Use repaired for tests (see Limitations) ☐ Use as is for tests (see Limitations) ☒ Scrap	
Concession Classification		☒ Major ☐ Minor	Submit after repair
			☐ yes ☐ no



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 913851

Date: 14-Sep-17

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chantal Lavoie
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us			
11 ea	Part: 647.9710 Lower Body Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils). Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (1 - 2 mils) per drawing. Job: 21630	Rev: A1	PO: PO37552 Line: 10
7 ea	Part: 647.1611 Wiper Deflector, Aft Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils). Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils). Job: 21623	Rev: A	PO: PO37552 Line: 3
4 ea	Part: D4842-3 Lower Cutter Body, LH Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils). Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (1 - 2 mils) per drawing. Job: 21624	Rev: B	PO: PO37552 Line: 4
4 DAS 9 9-89	Part: D4842-4 Lower Cutter Body, RH Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils). Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (1 - 2 mils) per drawing. Job: 21625	Rev: B	PO: PO37552 Line: 5
CERTIFICATE OF CONFORMANCE A.T.G. Industries Inc. certifies that all items in this shipment conform to the requirements Date: <u>14-09-2017</u> Made in Canada. <i>Seneca Plant</i>			



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37552**

Purchase Order Date 8/25/2017
PO Print Date 8/29/2017

Page Number 2 of 7

Order From :

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

VC-ATG001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 613-446-4544

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Diane Baker

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

3	164932	647.1611 Wiper Deflector, Aft	9/13/2017	6.00	\$10.70	\$64.
			Yes			
			9/13/2017			

As per Dwg 647.1600 Rev A
Hard Anodize IAW MIL-A-8625F, Type III, Class 2, Color Black; Prime IAW MIL-PRF-23377, Type I, Class N

Line Total: \$64.

4	164957	D4842-3 Lower Cutter Body, LH	9/13/2017	4.00	\$10.25	\$41.
			Yes			
			9/13/2017			

As per Dwg D4842
Rev B U/R
Hard Anodize IAW MIL-A-8625, Type III, Class 2, Color Black; Prime IAW MIL-P-23377, Type I, Class N, 1-2 mil max

Line Total: \$41.

5	164958	DAS 9 9-89 D4842-4 Lower Cutter Body, RH	9/13/2017	4.00	\$10.25	\$41.
			Yes			
			9/13/2017			

As per Dwg D4842
Rev B U/R
Hard Anodize IAW MIL-A-8625, Type III, Class 2, Color Black; Prime IAW MIL-P-23377, Type I, Class N, 1-2 mil max

SEP 15 2017

PO Instructions: PRIMER IS SUPPLIED BY DART

Note:

8/29/2017